## SUPERSTRUCTURE CONCRETE QUALITY CONTROL PLAN CHECKLIST

| DATE                              |   |  |  |  |
|-----------------------------------|---|--|--|--|
| CONTRACT NO                       |   |  |  |  |
| CONTRACTOR                        |   |  |  |  |
| SIGNATURE PAGE                    |   |  |  |  |
| []                                |   |  |  |  |
| QUALITY C                         | CONTROL PERSONNEL   |  |  |  |
| QCP Manager                       |   |  |  |  |
| [ ]<br>[ ]                        | Name Qualifications Telephone Number Duties Employer  |  |  |  |
| QCP S                             | QCP Site Manager  |  |  |  |
| [ ]<br>[ ]                        | Name Qualifications Telephone Number Duties Employer Same Person as QCP Manager   |  |  |  |
| Qualit                            | y Control Technician(s)   |  |  |  |
| [ ]<br>[ ]<br>[ ]<br>[ ]*<br>[ ]* | Name Qualifications (Certified Concrete Technician) Telephone Number Duties Employer Same Person as QCP Manager Same Person as QCP Site Manager |  |  |  |
| * Only                            | y If Applicable   |  |  |  |

| TESTING FACILITY |                             |   |  |  |
|------------------|-----------------------------|---|--|--|
|                  | [ ]<br>[ ]                  | Location List of Test Equipment Test Methods and Frequency of Calibration/Verification  |  |  |
| MATI             | ERIAL                       | S Source, Transportation, Handling, and Storage Procedures  |  |  |
|                  | [ ]<br>[ ]*<br>[ ]*<br>[ ]* | Admixtures - type Aggregates - size Curing Materials Evaporation Retardants Fly Ash - class Ground Granulated Blast Furnace Slag - grade Portland Cement - type Reinforcing Steel - size and type Water - if non-potable, the sampling and testing procedures |  |  |
| PROC             | CESS C                      | ONTROL OF AGGREGATES  |  |  |
|                  | <u>Grada</u>                | <u>tion</u>   |  |  |
|                  | [ ]*                        | Control Band Tolerances on each sieve for aggregates not in accordance with   |  |  |
|                  | [ ]*                        | 904.01(g) and 904.02(e) Statement that Control Charts shall be obtained from Certified Aggregate Producer for Production and Load-Out tests of each Aggregate, within 7 days of Concrete Placement Operations   |  |  |
|                  | [ ]*                        | Gradation Tests  [ ] Sample Procedure  [ ] Sample Reduction Procedure  [ ] Test Method  |  |  |
|                  | [ ]                         | [ ] Testing Frequency (Within 7 days of concrete placement operations) Procedure for Determination of Combined Aggregate Gradation  |  |  |
|                  | Water Absorption            |   |  |  |
|                  | []                          | Test Methods Testing Frequency (Minimum of one test for each aggregate used during concrete placement operations)   |  |  |
|                  | SSD E                       | SSD Bulk Specific Gravity   |  |  |
|                  | []                          | Test Method Testing Frequency (Minimum of one test for each aggregate used during concrete placement operations   |  |  |

<sup>\*</sup> Only If Applicable

## TRIAL BATCH DEMONSTRATION Location Type of Equipment Procedures **CONCRETE BATCHING** Description of Plant, including Capacity and Intended Batch Size Method and Sequence of Batching Initial and Routine Equipment Checks (e.g., mixers, scales, water meters, admixture dispensers, mixing equipment, and agitators, if applicable) Material Checks and Frequency of Testing Methods of Monitoring Ingredients Method of Recording Each Batch [ ] PROCESS CONTROL OF CONCRETE Slump Sampling Procedure Test Method [ ] Testing Frequency (Minimum of one test/sublot; also first truck for each day of production) Air Content and Unit Weight Sampling Procedure Test Method Testing Frequency (Minimum of one test/sublot, first truck for each day of production, and when there is a change in production, delivery, or replacement) Water/Cementitious Ratio Frequency of Determination (Minimum of one for each day of concrete placement operations) Compressive Strength Sampling Procedure Test Method Testing Frequency (Minimum of one set of two cylinders at 7 days and one set of two cylinders at 28 days for each sublot)

## PROCESS CONTROL OF REINFORCING STEEL [ ] Procedure for Monitoring Depth of Concrete over Uppermost Bar of Top Mat Frequency of Depth Measurements Statement that Measurements shall be taken as soon as Concrete is Placed and Struck Off and while still Plastic RESPONSE TO TEST RESULTS Water Absorption Procedure for Corrective Action when Test Results differ from Design Mix Value by more than 0.5 percent Statement that Source shall be Investigated and an Absorption Percent determined [ ] Bulk Specific Gravity (SSD) [ ] Procedure for Corrective Action when Test Results differ by more than 0.056 for Fine Aggregate or 0.032 for Coarse Aggregate from the Mix Design values [ ] Statement that source shall be Investigated and the Bulk Specific Gravity (SSD) determined Unit Weight Procedure for Corrective Action when Test Results differ by more than $\pm 1 \text{ lb/ft}^3$ from Predicted Value for Air Content Measured (not to exceed unit weight representing w/c of 0.420) Other Quality Control Tests Procedure for Corrective Action [ ] Compressive Strength Air Content

## **CONCRETE HAULING**

[ ] Equipment and Methods for Delivery[ ] Traffic Pattern to the Site of Work

Slump

| CONCRETE PLACEMENT              |   |  |
|---------------------------------|---|--|
| [ ]                             | Placing Sequence Identification of Placing Equipment Description of Pumping Procedures  |  |
| FINISHING,                      | TEXTURING, AND CURING   |  |
| [ ]                             | Methods for Finishing, Texturing, and Curing Concrete<br>Description and Identification of Equipment  |  |
| FORMS, FALSEWORK, AND CENTERING |   |  |
| []                              | Procedure for determining when forms, falsework, and centering may be removed Frequency of samples for determination of removal (Minimum of two cylinders or two beams)   |  |
| DOCUMENTATION                   |   |  |
| [ ]                             | Statement that Aggregate and Mixture Tests, and Depth of Cover of Concrete over Reinforcing Steel Measurements shall be maintained for a Period of Three Years after completion of Contract and that the Location shall be Readily Accessible for review by the Department. |  |